BEFORE THE
UNITED STATES DEPARTMENT OF DEFENSE
ARMED FORCES EPIDEMIOLOGICAL BOARD

In The Matter Of:

ARMED FORCES
EPIDEMIOLOGICAL BOARD

U.S. Army Medical Research
Institute of Infectious
Diseases Auditorium
The Dalrymple Conference Room
Ft. Detrick, Maryland
Friday
July 8, 1994

The above entitled matter came on for hearing pursuant to notice, at 4:16 p.m.

BEFORE:

Dr. Lewis H. Kuller, M.D., President, and
Colonel Michael R. Peterson, U.S.A.F., B.S.C.,
Executive Secretary

APPEARANCES:

Dr. Kuller
Colonel Peterson
Colonel Takafuji
Captain Berg
Colonel Erdtmann
Colonel Parkinson
Commander Ungs
Colonel Leitch
Commander Clifford
Colonel Schuster
Commander Helmkamp
Commander Gray
Colonel Wright
Captain Robbins
Lieutenant Kelley
Dr. Weske
Major Klenke
Dr. Johnson-Winegar
Colonel Friedlander
Colonel Byrne
Colonel Hoover

APPEARANCES (Continued):

Colonel Taylor
Colonel Wade
Colonel Baze
Colonel Jennings
Dr. Brandt
Dr. Smith
Dr. Jahrling
Dr. Broome

I N D E X

P R O C E E D I N G S

(Time Noted: 4:16 p.m.)

DR. KULLER: On the record. Two things. First, we want to take care of the dates for the next meetings and rough idea where they -- what is going on. COLONEL PETERSON: Yeah, the dates for the next meeting have been set for quite awhile now. Just to remind everybody, it is October 6 and 7.

DR. BROOME: (Inaudible.)

COLONEL PETERSON: Pardon? I know. Unfortunately, the way we pick these things is the way I think most organizations do. We send out a -- send out a request and then -- we have done this for the next year also -- we send out a request and ask people what dates are available. Our objective is to get the largest number of people here, and that is basically the driving force of it.

DR. KULLER: Okay, and after that, what is the next --

COLONEL PETERSON: After that, the dates I come up with using the same criteria are going to be February 23 and 24, 1995, which is a Thursday and a Friday; July 6 and 7, which is a Thursday and a Friday; and October 3rd and 4th, which is a Tuesday

and a Wednesday.

Actually, the first two dates, February and July, was pretty close to 100% of the Board members, and October was a real tough one to come up with dates, and I -- and as you just mentioned, Claire, I specifically avoided ICAAC on those dates.

I was able to for next year, because I think it is October -- it is either early or later in that first week in October, so I did the best I could on that.

DR. KULLER: Over in '95, what is the date?

COLONEL PETERSON: 3 and 4. No -- that is in '95, right?

DR. KULLER: Yes.

COLONEL PETERSON: Okay, October 3rd and 4th, 1995.

VOICE: (Inaudible.)

COLONEL PETERSON: 6 and 7 of October, 1994.

DR. KULLER: Okay, the -- anything else?

MALE VOICE: (Inaudible.)

COLONEL PETERSON: One more time. October 6 and 7th, 1994, and that will probably be here at USAMRIID, okay? Then, 1995 dates, February 23 and 24; July 6 and 7; October 3 and 4.

MALE VOICE: Okay.

COLONEL PETERSON: Did you want to mention, Dr. Kuller, just very briefly about our meeting back in April with Dr. Joseph? I mean, I made myself three little notes to -- you know, it is kind of to summarize it, and I don't know if you want to mention it to the Board members?

DR. KULLER: Well, I did -- as you know, I did go up one day and meet with Dr. Joseph at the Department of Defense at the Pentagon and talked to him about the Board and tried to give him a briefing of what we were doing and to also invite him to the meeting.

I will do the same thing again, hopefully, and try to get him to come to the next meeting. He said he would try to get to this one. Obviously, he didn't -- and hopefully try to get him to come to the meeting October 6th and 7th.

I think it is important for him to see what these Boards are about and see what the Board does and see what the discussion is, so that -- I think that is important.

I think he has some understanding of the Board a little bit, anyway, because he had a -- he said he had a similar type of Board in New York

City, but it really isn't the same, this Board of the New York City Health Department.

Being a member of the Board of Health in Allegheny County for years, the Board of Health functions very differently, more a consulting Board than this Board functions, and I think it is important to sort of recognize that phenomenon. So, hopefully, he will come to the next meeting.

He was just coming aboard and I think that one of the problems, of course, is that he has got a lot of things to do, and coming into that kind of a job a lot of learning to do, obviously, as well as the many issues that are involved. So, hopefully, we can get him to come to the next meeting. You all -- we want to go on now.

COLONEL PETERSON: I was just going to mention, he mentioned three specific areas that he thought the Board might be interested in collaborating with him on specifically.

One was issues related -- medical issues -- related to the Persian Gulf illness and, of course, we talked about that and are going to proceed on some items we have talked about during the last day, or two here.

Another one was what he labeled -- and I

really wasn't real clear on what he meant by this, specifically, but the bio-technical/bio-medical environment future vision and plans.

I am not sure if you understood any more about what he meant by that than I did, but maybe he was making some reference to things like medical video teleconferencing which is beginning to start to take off not only in general, but also in the Department of Defense and that -- we really didn't get into specifics on that. That might be something we can ask him more about if he does come.

The third one that he addressed to the Board was issues relating to suddenly incurring contingencies, much like the Gulf War, so there were no surprises, I think, in the types of issues that he at least initially indicated that the Board could help him with.

DR. KULLER: I think that one of the things, I think -- in this biotechnology -- I think he was sort of looking at was the application of new biomedic -- application of new biomedical approaches and biotechnology, that they may apply in the Department of Defense, and how they relate to the -- to both the Department -- to the Defense as well as the relationship with the civilian environment,

which -- how they -- how they interact, and I guess that is becoming important with telecommunication among bases.

We saw that at one of our meetings, I think, at -- what was it? At Dulles Airport, if you remember, there was a demonstration of one of the surgeons about telecommunications of material and telecommunication of slides and things across -- from remote bases to Walter Reed, or to Bethesda, et cetera, or even here, I guess, for diagnosis, rapid diagnosis, using new biotechnology procedures and consultation based on rapid new bio -- new technology, as well as the application of new biomedical techniques. We heard a lot about that today, I think. So, I think it was very good.

COLONEL PETERSON: That is all I have.

DR. ASCHER: His concern might be that in certain programs they might not be keeping up to speed with some of the rapid developments in the civilian sector, and the biotechnology -- and I think that if the question comes up you can assure him that, at least from what we heard today, they are right on the cutting edge in certain areas.

DR. KULLER: Yeah. I think it is in -- I agree. I think that may be one of the issues in

terms of the concern.

DR. BROOME: Does the technology issue extend to developments in database and information technology? Is that something the Board has ever considered? Certainly from the point of view of surveillance and linked databases it is relevant to a number of the issues we discussed yesterday.

DR. KULLER: Claire, about two years ago we had an excellent, excellent presentation on that by a physician who was involved with Quality Assurance who has -- he has now since left. He was a urologist. What was his name?

COLONEL PETERSON: (Inaudible.)

MALE VOICE: Right.

DR. KULLER: He was a urologist and he presented --

COLONEL PETERSON: He since retired, I think.

DR. KULLER: It really was a very, very good --

MALE VOICE: His name was Buck.

MALE VOICE: Yeah.

COLONEL PETERSON: Yeah, Al Buck.

DR. BROOME: Buck.

DR. KULLER: It really was a very excellent

presentation of his attempt to develop a -- what really was quite a sophisticated database of information. Unfortunately, right after that he left and that was it. So, I think that potentially might appear again, because there is some real interest.

He was very interested in the surveillance issue, database management systems, systems evaluating quality of health care within the health services.

DR. BROOME: Did someone take his place, because that person really should be in --

COLONEL PETERSON: No -- I don't know. I don't think anybody has taken over exactly what he is doing. That may be an area, I think, that the Board could be very proactive in.

I think CDC might be a stepping stone for some of the things that you may be involved in with what DOD has not done, or could be doing, or we are a step behind, or something. I mean, he might be a good resource to push us along, or something.

DR. KULLER: I thought this new Center for Prevention and Promotion, the Army's Center, I think, has part of that component, doesn't it?

As I understood from the diagram, that is

part of this new Center for Prevention, and Health Services is going to include a data management system, I guess, an information system.

COLONEL PETERSON: As a matter of fact, an agenda item for the future might be to hear what CDC is doing in this broad area, or something, just to kind of generate some ideas and discussion and focus, and I think -- again, I think that would be a very, very positive area for the Board.

DR. KULLER: We worked fairly closely with NASA, and NASA has gotten very much interested in this, as well -- interested in this, because of its satellite communication systems.

We have been working with NASA and with PAWHO in the World Health Organization to try and set up a network of reporting systems, especially in countries where there is a marginal training -- both training and in a marginal data collection system.

But, NASA has gotten very interested in telecommunications as a -- in the health field as a whole group, so maybe sometime -- also, bringing the NASA people in terms of what they are doing in telecommunications and satellite systems, and maybe linking that up, somehow.

DR. BAGBY: Last month in San Diego I was

introduced to a group I had never heard about before that are as far advanced in this as anyone could possibly be at this point, I guess, and that is the Black College Satellite Network.

I don't know if you have heard about them, or not, but they -- 12 years ago, they recognized that, traditionally, black colleges had somewhat poor faculties, but they had within those some very good faculty members, and they decided they wanted to share this resource they had of good faculty members.

So, they set up a corporation which is headquartered here in Washington, and they bought a lot of time from NASA for satellite time that they own. They own the full rights to it and they can put

on -- communicate satellite communications, whether it is training courses, or whatever it is, for a fraction of the cost of what the rest of us have to pay, because they blocked off this mass of time. They might be a good one for you to contact in this whole idea of communication.

DR. ALLEN: It goes certainly far beyond the communications issue. It touches right in with what we talked about about; tracking of personnel,

knowing who is coming back, what their experiences have been if they have been overseas, the whole linkage of medical records back and forth.

I think there is a lot of different areas of this that we might well want to address and provide some assistance and, again, coordinate with across the Services. The Air Force indicated they are starting their new Prevention Center, also, and this would be an ideal time to get in on the ground floor.

DR. KULLER: This might be good, and I don't think we could really pump it up in October, but maybe the February meeting, and look at a place, or look for the group to bring it in, at least part of the time.

COLONEL PETERSON: Yeah, I would suggest -- I would solicit suggestions for activities in this area for a future Board meeting from the Board members. I think a lot of times what we hear is, "What are we doing in the military?"

That makes a nice presentation to the Board, but I think what Dr. Joseph is after and what the Department needs is to hear from what the Board members know, or interact with, or can bring to the table that may be different than what we are doing

with in DOD.

DR. HANSEN: I would suggest you go back to the minutes of that meeting where Dr. Buck spoke, because, as I recall, it was very titillating and that it was quite clear that he identified some of the problems DOD was having in information management, and I think if we picked up there, somebody has to be dealing with those problems, even if no one replaced him.

DR. KULLER: We should find out. That would be very useful in terms of our background, so we don't go over the same territory again, and just find out whatever happened, because at that time they were moving pretty aggressively into a database management system within the government, within DOD and -- at least for their medical records, and it is completely disintegrating.

DR. ASCHER: We heard about a serum bank with 12,000,000 sero -- you know, a million and a half a year, and you should have a computer program that would tell you at any point in time where every service member is, within -- with some error.

Federal Express can do it with packages in real time, right? Why don't -- wouldn't we know the unit of assignment? I bet you can't get that

information.

DR. KULLER: You want to know where the people are, or you want to know where the sera are?

DR. ASCHER: Where the people are.

MALE VOICE: They go with the sera.

DR. ASCHER: I mean, just, say, who went to the Persian Gulf? I was told they didn't know who went, in retrospect.

DR. PETERSON: Yeah, that's right.

MALE VOICE: Fed Ex has a profit, in order to make the difference.

MALE VOICE: I bet they could know where the sera are.

(Laughter.)

DR. SELL: The Institute of Medicine conducted a three-year study called STAR and this dealt with strategies for the year 2020. There was one section added to that on biomedical sort of events, but I don't know if any of you are familiar with it.

I was a member of the committee that dealt with that area. This discussion you are talking about was at least one half of the discussion time of what was taking place in producing that report.

That report has now been turned into a book

and the book has now been turned over by the Institute of Medicine to the -- I guess to the Surgeon General of the Army, and what amazed me the entire time I served on this thing is why AFEB was not doing this, because this is exactly what I had thought of this group doing. Now, they have commissioned another group and the leader of the group actually was a former director of NIH, Fredericks. He was forfeiting all of these activities and the people from industry and other places, I guess to have the broadest possible scope of activities, and it is only a tiny portion of STAR.

STAR is mainly being dealing with weapons and other things, but all of STAR is loaded with exactly this kind of suggestion and in there, for instance, they want battlefield -- one of the things -- the goal for 2020 is to have each soldier have a pin and on that will identify every toxin they come in contact with and locate him precisely where he is at.

It will tell you what his blood pressure and every other vital sign is and -- so that you have all the information on everyone all the time, and have it in a way that the enemy can't determine

where he is.

That was one of the things that they really focused on, and battlefield removal of individuals as long as you have dispersed soldiers. You no longer have soldiers together with each other, and now requires non-people movers to get the soldiers back in for care, because they are no longer supposed to give them -- that a Corpsman can go and grab someone and bring them in, so there were -- another major issue were people movers.

It sounds like little mobile -- what do you want to call it? Coffins, to sort of slide into to maintain the protection and blood pressure and such for the individual while they are being routed in -- into a local battlefield site.

Those things all came up in that STAR report and, clearly, they should have had input from AFEB, but at least I guess what I am saying is, we should get hold of the report.

DR. ASCHER: Yeah, can we get copies of that?

DR. SELL: It sounds like if it went through the Army -- I mean, I don't know if you guys have even heard of that?

MALE VOICE: The Institute of Medicine has

it. This was national (inaudible).

MALE VOICE: (Inaudible.)

FEMALE VOICE: What is the name of it?

MALE VOICE: I remember a book.

MALE VOICE: We will look and see.

MALE VOICE: If nothing happens --

MALE VOICE: With just a word of caution, I think that when we are talking about data management, public health data management, it is relatively simple once you sit down to determine what you want, to design a computerized system.

The problem is that, you know, like sports medicine, that injury, they will develop a very good system, but then to try to get that (inaudible) integrated, say, with outpatient and hospitalization, I mean, right now the public health -- we have a tuberculosis program that is automated, immunization has a separate system, laboratories have a separate system, each county has a separate system and each one may be a sort of a state of the art system. The problem is each one has their own individual objectives and they have designed their own system and (inaudible).

DR. KULLER: I think --

DR. BROOME: You've got a tremendous

advantage with the military.

MALE VOICE: Yes.

DR. BROOME: You have got an identification number for everybody.

DR. KULLER: I think -- yeah. I think the main thing is to find out --

DR. BROOME: And a lot more people.

DR. KULLER: -- is to find out what is going on, because it may well be that there are so many systems that, basically, it is going to be just utter confusion and no useful data.

I think we could at least find out. Okay, well, we will put that on --

DR. SELL: I will send a copy of that report so that you can see -- (inaudible).

DR. KULLER: What is it called?

DR. SELL: Oh, I can't remember.

COLONEL PETERSON: Maybe just fax the reference to me, or something and I can --

DR. SELL: Okay.

DR. KULLER: I meant, we would probably wind up just having it, if he would tell us what it is. Okay, the couple of other -- a few other things. We did get the response on the mefloquine question and that is taken care of, so that -- that

issue is solved.

As you know, we heard today that the -- that the vaccine program really needs a rapid turnaround from the Board in terms of recommendations on immunization.

These recommendations really are, I think -- don't -- are not primarily the censorship they have at their own vaccine facility, but really deal with issues about immunization, issues related to immunizing with agents, vaccines which are on IND, what vaccines should be available, be pushed, and when the vaccine should be used, who is at risk and what kind of responses are necessary, and things of this sort.

This is a very important component to the Board, and what we have done is proposed that in the first week of August, August 3 to 4, or so, that the disease -- as many members as the disease control subgroup within limits who could make it would meet in Washington for a day, and Mike Ascher would chair that, probably in Falls Church, or somewhere -- in their National Airport, so people could get in perhaps early in the morning and then be able to get out the same day, but I could perhaps find out how many of the disease control members, Board members

who are Disease Control, were here. Jim, could you make it?

DR. CHIN: I will be in Yokohama.

DR. KULLER: Okay. Mike said he could make it. Dr. Bagby?

DR. BAGBY: Yes.

DR. KULLER: Okay. Claire, you said you could do it, right?

DR. BROOME: Yes.

DR. KULLER: Alright, very good. Jim, you are going to be in where?

DR. CHIN: Yokohama.

DR. KULLER: That is a problem. Sorry about that.

DR. CHIN: (Inaudible.)

DR. KULLER: Huh? Greg is -- okay. So, we will give him the day. Jack, can you?

DR. GWALTNEY: I am not sure.

DR. KULLER: Would you look? Yeah, it will be probably the last -- it would probably be the 3rd or 4th of August and we will try to do it -- and the idea would be we talk to them as to try to get the -- everything together in one day so that it is not -- doesn't drag on.

If possible, get some decisions made and

know where everything is today. We heard the overview. We will be out here again in October where we could basically begin to deal with some further issues, but I think there is some particular things.

MALE VOICE: Could we pick a date now?

DR. KULLER: Chad, can you do it?

DR. STEVENS: (Inaudible.)

DR. KULLER: You can't do it that day?

DR. STEVENS: I am in Yokohama.

DR. KULLER: You are in Yokohama, too, huh? Okay.

MALE VOICE: Can we maybe pick either the 3rd or 4th?

DR. KULLER: Which day would be preferable for this, the 3rd or the 4th? That is a Wednesday and a Thursday.

MALE VOICE: Thursday I am supposed to leave.

DR. KULLER: So, make it the 3rd. Is that better? Make it the 3rd, then, of August. Does anybody have any problems with August 3rd?

(No response.)

August 3rd. So, it will be August 3rd. Claire, is that okay with you, August 3rd?

(No response.)

Claire, August 3rd is alright?

DR. BROOME: I am not certain, I will check.

DR. KULLER: Okay, please check, because it is important that we get at least as many members of the Board as possible for that meeting from the Infectious Disease Subcommittee -- Disease Control Subcommittee.

DR. CHIN: Something that we prepared in advance by --

DR. KULLER: The problem is, it is a class -- it is going to have to be classified again, okay? That does a couple of things. One, we can't send anything out ahead of time and, two, we have to -- the location has to be --

DR. CHIN: We may prepare something.

DR. KULLER: Yes, yes. As a matter of fact, we have talked about that.

COLONEL PETERSON: I think also they are going to come up with a straw man, basically, for us and give us the rationale, the help to get the straw man so we can change it if need be.

DR. CHIN: Because, otherwise, you wouldn't be able to do that (inaudible).

COLONEL PETERSON: We made that very clear we need to have something to work from. I think, Mike, you could --

DR. ASCHER: Definitely, we need, though -- we need the request in writing (inaudible).

COLONEL PETERSON: It is in writing. It is in a DOD Directive. We were --

DR. KULLER: It is in writing. We have a copy right here which basically says that within -- within -- they are behind, as they said, right now. They have got a memo from Joseph that says they are supposedly in consultation with the Board, and to make recommendations to Joseph. It is supposed to be within four weeks of eight weeks ago.

COLONEL PETERSON: Lieutenant Colonel Falkenheimer at the last meeting gave a short brief on this.

DR. ASCHER: Remember why this is coming about, as I understand it, it was that when Desert Shield/Desert Storm came and they asked the question, "Where are our vaccines and where is our policy," the answer was, "We don't know, around here somewhere."

It turned out that because they didn't have an algorithm to take a look at Kuwait and Saudi and

go to the (inaudible) and look at the current epidemiology, dot, dot, dot, and fill in what might be used both for BW defense and for normal use, it is something they didn't have, apparently, and they would like help making one. I think we can do it.

DR. KULLER: I think it is supposed to be regularly updated periodically. I am not sure how often, but --

COLONEL PETERSON: I will send -- I will send each of the committee members a copy of the DOD Directive.

DR. ASCHER: But, I think an algorithm is what they are talking about.

COLONEL PETERSON: Well, it is very specific. There are very specific questions. I have a copy I
can -- there is a copy here. They are very, very specific.

MALE VOICE: Actually, I have got it, too. It is one short paragraph and I would be happy to find it while you are (inaudible).

MALE VOICE: It probably is also going to be important for any of the vaccines that are under IND to look at what kind of informed consent is necessary.

DR. KULLER: Well, this is a very -- this is a very substantial problem, because as somebody said, it is very difficult when you have your troops in the field to tell the General that they have got to go out and get a signed -- each soldier has got to sign a consent form.

MALE VOICE: Well, that is exactly right, and what happens when somebody decides to opt out? I mean, are you not going to send them over and -- you know, or can they opt out?

DR. KULLER: Well, what they did the last time with FDA is they got a waiver, and that is basically -- you have to -- I think that we have to decide when they should get the waiver and what should be the implications.

COLONEL PETERSON: Let me just read you this paragraph real quick. It is a Department of Defense Directive dated November 26th, 1993 and the title is "DOD Immunization Program for Biological Warfare Defense", and I will send this to you, but let me just read you the paragraph that applies to the Armed Forces Epi Board.

"The chair of the Armed Forces Epidemiological Board in consultation with the DOD Executive Agent and the Secretaries of the Military

Department, annually and as required shall identify to the Assistant Secretary of Defense for Health Affairs vaccines available to protect against validated biological warfare threat agents and recommend appropriate immunization protocol."

So, we will have a straw man that addresses those two areas that we have been tasked in the Directive, but it also says it is supposed to be done annually and, obviously, it hasn't been, so we should remember that basically in some ways that is -- if it says through Armed Forces Epi Board, it is supposed to be updated annually.

So, once we do it this time, then annually, perhaps at the fall meeting every year, the Disease Control Subcommittee can meet before the fall meeting and just update the current status, okay? Yes?

DR. JORDAN: I think you stated that the Board of -- the members ought to have that Directive and read that, because it really does put a lot of responsibility on the (inaudible).

The second thing is that the waiver was granted because of true emergency situations before. However, I think as part of this vaccination plan that it is going to include the routine vaccination

of soldiers when the threat is not so imminent. If I am not mistaken, things like smallpox and anthrax.

Are there rapid deployment units that should have the anthrax, or the smallpox at this point so -- and it is going to be hard to get a waiver in those cases, I imagine.

DR. KULLER: It asks specifically in the recommendations, is the way I look at it in reading this over, it asks specifically which soldiers or which groups should be immunized and when, and when the policy should be modified. So, example --

DR. ASCHER: I am looking beyond this to the fact that we have previous recommendations since I have been out here for use of reporting cephalitis, all of which are out there in la-la land, so you are going to have to -- if you decide to go into the (inaudible), you have got to go out and pull those in, because they are endogenous threats.

So, it has to be eventually pulled together into some meaningful document that includes all vaccines, all measures of infection.

DR. KULLER: Right. So that we will be moving, hopefully, forward in the early part of

August in, hopefully, one meeting, and then the next meeting the Board can meet again.

The Disease Control can meet before the meeting of the full Board, or during the meeting of the full Board in October, here, and finalize any particular problems, or continue any problems. I think that is an important contribution of the Board.

The other aspect, of course, was the letter that we prepared for Dr. Joseph regarding the Gulf situation. Unfortunately, we can't get -- couldn't get the letter retyped again after everybody's changes. We put in -- almost everybody's changes in, including the consensus from both sides of the table. I think it reads very, very well.

It will take awhile to get the letter finalized, signed off and to Dr. Joseph, but hopefully he will respond and suggest a subcommittee and we will create a subcommittee of people to deal with that issue.

I think that in terms of design of this study there are particular people on the Board who would have expertise with regards to study design, data collection and issues related to measurement of psychological and behavioral attributes.

I had suggested also that it might be useful -- and I don't know whether we could work this out -- but, it seems to me because of our concerns about some of the behavioral aspects of these problems and the psychological problems that are occurring, that it might be useful at the meeting to have some briefing by somebody from either the -- that deals with the psychiatry or psychology, or mainly the psychiatry program within the military, especially in preventive medicine that deals with the issues of -- and how these things are being looked at and how they deal with them, because I think we really haven't heard that.

Yet, a lot of us are concerned that one of the big problems that we are going to be dealing with constantly in these events is going to be -- especially with the reservist -- is going to be dealing with the stress, the dislocation and physiological and pathological changes, as well as problems of vaccines, toxins, biological warfare agents, et cetera.

COLONEL PETERSON: They all work with the preventative medicine consultant to --

DR. KULLER: So, it might be useful.

DR. ASCHER: We could look at things like

instructions to the Commanders around deployment and what is being written for them after the fact. One of the things that I am seeing is our own experience in the Reserves, and one of the things was that deployment came out of the blue. There was no warning, so the unit was not prepared at all.

You are supposed to go to Letterman, which is, you know, 55 feet down the street, and the next thing you know they are in Colorado, and the people were just completely unprepared and the Commander was unprepared.

So, after the fact they would hope you would put in place instructions in the Commander's handbook of what you do when you go over unprepared and what you do when you come back, and see if the people are thinking about them.

COLONEL PETERSON: So, what we are talking about, then, is psychological issues related to pre and post deployment using PG -- using the Persian Gulf illnesses as a model. Is that what we are talking about?

DR. ASCHER: Exactly. Well, even, you know -- I am sorry. Go ahead.

COLONEL ERDTMAN: Dr. Kuller, last week -- well, I should -- let me back up. Every week there

is a general officers meeting at Dr. Joseph's office to talk about this evaluation program that you heard about yesterday that generated a lot of interest.

As a follow on to that, Dr. Joseph wants to say, "Look, this thing went sour just like after Vietnam with Agent Orange and now after the Gulf War." One of the problems that -- one of the systemic problems that we are having is how do we have a long term plan for trying to fix it for the future, so we asked the Army to take the lead on that thing and move it up and put together some sort of a concept of how, perhaps, this could be done better in the future.

But, I would like to have AFEB participate in that process and I think this is something that -- this is --

DR. ASCHER: I believe, your area.

MALE VOICE: It is the highlight of the letter.

DR. KULLER: Well, our letter basically says that we think that the AFEB should be doing this and should have a role with the Preventive Medicine officers in terms of doing this, and it might be worthwhile for -- to come from you in the sense of if you are going to play --

COLONEL ERDTMAN: My first report is next week on what this plan is and, so, my recommendations are -- it is a rough cut, but --

DR. KULLER: Well, I think it would be a very good idea. I think a lot of us have had -- I mean, I think a lot of us have had experience in looking at these kinds of issues, and there is a lot out there in trying to deal with them, but, you know, I really think that, you know, that part of it may be a plan, but part of it may be an education going up as well as going down in terms of how to deal with these things and in trying to defuse them.

I am not sure you can defuse them, to be very honest. I think that there is a certain political ramifications, unfortunately, which make things extraordinarily difficult to diffuse no matter how good you are.

But, at least, you know -- it is like we just talked about in telecommunications. I think there are big corporations in the United States that have tremendous problems in corporate dislocation, both in terms of corporate moves, but also in reducing their staff, and especially people who are in mid-life, or even older who don't expect to be dropped, or having substantial cut-back in force and

who deal with these issues in terms of how to handle these kinds of problems, what kind of illness behavior you see and how this relates to what you see here. Is this really the same kind of a general phenomenon and -- you know.

DR. HANSEN: Well, I think he is asking for our help. Is he asking for us to set up a subcommittee?

DR. KULLER: Well, he asked if they --

DR. BROOME: Because he needs to do it right now. I mean, I got the impression you are talking in the next two months, right?

DR. KULLER: I think we --

MALE VOICE: Three weeks.

(Laughter.)

DR. BROOME: Right, but I mean --

DR. KULLER: Well, I think the one way to -- I think the one way to do this, as we have done with other things, would be to say -- is to put in writing a recommendation for us to get involved, and we have already written to Dr. Joseph and said we think we should be involved, given the fact of what information we have heard here.

(Pause.)

COLONEL ERDTMAN: I am going to be -- I

have to present something next week, but it is going to be very broad and --

DR. KULLER: Well, Rick, when --

COLONEL ERDTMAN: It is not going to be a completed project and I -- what I would like to do is maybe in October, you know, have that as a starting point for this discussion and then have it further developed and --

DR. KULLER: Why don't you try to get us -- something to the Board as soon as you can, asking the Board to participate in this discussion, if that is all you have to do.

That would get us basically involved with you in doing it, and then the next thing we can do is just create a subcommittee. Once we get that letter from you, I can instantaneously create a subcommittee and we can go from there.

COLONEL PARKINSON: What we have to do is call (inaudible).

MALE VOICE: Yeah.

COLONEL PARKINSON: Your letter arrives at Dr. Joseph's office probably before we (inaudible). I think you will want to find Dr. Joseph has already reached out on this very issue to you directly, Dr. Kuller, and said, "Hey, we want your

help in this area, so here is the avenue to do it," but as soon as that letter -- if that is the right sentiment that is in that letter -- as soon as that gets to Dr. Joseph, it primes him, so it filters down from above, as opposed to coming from us. For example, (inaudible).

COLONEL PETERSON: What I would suggest is that the letter arrive and you do what you have been tasked to do, and then after Dr. Joseph has had a chance to read that, you might propose to Dr. Joseph subsequent to reading the letter that the AFEB -- how about if we go to the AFEB, "I would like some additional help on this to make sure we are doing it right," or whatever.

I think that would be good. The timing on the letter -- I am on leave for the next two weeks, so it will be three weeks before Dr. Joseph gets the letter, at least, which does not help you at all, that much.

DR. HANSEN: Well, why don't we just get it out?

COLONEL PETERSON: What?

DR. HANSEN: When the letter is done?

COLONEL PETERSON: Well, it has to be -- if somebody else wants to take it back and re-type it.

DR. HANSEN: Yes. I mean, it has all been done.

COLONEL PETERSON: It just has to go out on letterhead stationery.

DR. HANSEN: Right, but --

COLONEL PETERSON: It has to go out on letterhead.

MALE VOICE: Well, it should go out per your signature on AFEB letterhead stationery.

DR. HANSEN: But, if you charge your secretary.

MALE VOICE: That is not a problem if you can fax it in and ask her to type it up.

DR. KULLER: If you could fax it back to -- are you going to be in your office tomorrow?

COLONEL PETERSON: I will not be in my office. Tomorrow is Saturday. I am not going -- I am going to be gone tomorrow for two weeks.

DR. KULLER: Where is the letter now? I could take it.

COLONEL PETERSON: It is right here.

DR. KULLER: Well, then, give it to me. That is ready. Just give me --

COLONEL PETERSON: Good, I can check that off my list of things to do.

DR. HANSEN: Yeah, we don't want to have to wait three weeks. That would be bad.

DR. KULLER: I can do that on -- if it should go on AFEB stationery.

COLONEL PETERSON: I think it would be appropriate since it is coming from the Board.

DR. KULLER: Do you have some AFEB stationery?

COLONEL PETERSON: Well, I don't have any, and that is the problem. I mean, just give Jean a call.

DR. KULLER: Okay, I will give Jean a call and get AFEB stationery.

COLONEL PETERSON: We can mail it to you Overnight.

DR. KULLER: I will put this in my pocket. Three weeks from now I will remember it.

(Laughter.)

If I put it in my pocket it will get done Monday. Okay, so it will go out on Monday, then.

MALE VOICE: That takes care of that.

DR. KULLER: Or, Tuesday, as soon as I get some stationery. If I have trouble getting stationery, I will do it on my own stationery, that's all. Okay. Yes?

DR. BROOME: In terms of your immediate task, there were a couple of things that came up yesterday when I believed you weren't here that I think are relevant.

We talked about the fact that the serum repository that is currently collected of HIV tested individuals provides an excellent baseline serum for looking at possible subsequent exposures on deployment.

We talked about the fact that improved information systems on troop movements and location and potential exposures would be helpful in subsequent situations and then, finally, when you do end up having a problem, these issues about doing scientifically valid studies that look at likely hypotheses is obviously something that the Board feels pretty strongly about.

COLONEL ERDTMAN: Colonel Tomlinson was here yesterday and I have already talked to him and he
has -- also has more information, and we will try to incorporate some of the discussion into the plan that will be presented next Thursday, but that will just be the starting point, and then I will formally ask that this be more definitively looked at by the

Board.

MALE VOICE: This is going to be a tri-Service effort even though he is asking me in this particular project to take the lead. We are already setting up a meeting next week with the Air Force and Navy to help put the first cut together before we even -- before we even present it the first time to Dr. Joseph next week.

MALE VOICE: (Inaudible.)

MALE VOICE: What's that?

MALE VOICE: (Inaudible.)

MALE VOICE: The Board's guidance on what sort of exposure data, which you think would be prudent to capture in the generic sense, would certainly be useful.

It is easy to say -- it is nice to take exposure data, but I would have to ask to what frequency is the Desert Storm -- was it something that we have rooms of data from -- about the hygiene data to -- and the data in a situation like this, data does not diffuse the situation, because you are always collecting something different.

I don't mean to diminish your proposal, or

serological tests, or something else, but the other types of data captured as far as chemicals, or dead sheep, or other types of things, are very difficult to try to get here after the fact.

So, you have to have some structure of what you can reasonably predict. I think we have all done studies in terms of after the fact when you get a retrospective look. Something is not available and trying -- the cost of perspective studies of what we are suggesting is prohibitive even when you have a protocol.

So, I think you have to lay a background, determine what is feasible and hopefully that will fit within the current military structures, and remembering after the fact that we lack the military (inaudible) exquisite capture of ambulatory data, outpatient data.

DR. KULLER: I think just -- we are going to finish up here, but I think one of the things that is needed is an experiential model, and that is that these are -- you have to look at past experiences of events that are similar in what has happened and how people have responded and what you have done about them to be prepared for the next event, and the same thing with the design of the

studies, you know.

The people who are designing, you know, Gulf War related studies may not have been looking very carefully at the people who did all the work in looking at the Vietnam issue. The agents may be different, the disease implications may be a little bit different, but the methodology, and especially --

There was a phenomenal amount of work that was done to try and locate the troops who were in Vietnam and an equally bigger problem which was never resolved about where they were in Vietnam, and as you may know we -- the military spent a small fortune -- the Department of Defense -- trying to locate where all the troops were in Vietnam, and could never figure that out.

I mean, we did replication studies where we gave the same names -- blank. I mean, changed the names, changed all the numbers, but they were the same people, except that they had these numbers, fed it back in again into the system and got completely different data and that is when, basically, the whole thing collapsed, because it was obvious that -- and legitimately -- I mean, in Vietnam that little bit less than it was in Desert Storm, but in

Vietnam, you know, nobody was keeping exact track where everybody was at any one moment, and the result was that that whole system collapsed.

But, it was a tremendous amount of work and nobody should do that over again, because it is clear that that system does not -- there is no way that system is going to work in war time that you are going to be able to tell somebody within a hundred feet where somebody is at any one day.

No matter how anybody tries, it doesn't work, nor could they ever figure out merely where the ranch hands basically drop H --

DR. ASCHER: It sounds like an internal PR problem. One of our Board meetings we almost had a standing ovation for the people from Somalia telling about how well this patrol works. That report should have been on the front page of the Military Times.

DR. KULLER: That's right.

DR. ASCHER: The next week, because then we don't have things that we do see in those kind of rags saying there was a huge amount of vomiting and diarrhea in the Gulf. It's nonsense.

It was wonderful, very, very low numbers. We all heard it, but there is nothing neutralizing

now. So, when things -- you have to get the good news out there, and I think if that had been done, in retrospect, it would have helped a lot.

It is boring. It says, "Preventive medicine has great success in Gulf. Rates of this, lowest ever." Hey.

MALE VOICE: That is not only in -- in the -- I think that is part of it and I think information -- I think we talked about this when this happened and pointed out at that time when we had this discussion about getting the information out and didn't, and that is one of the things we have -- perhaps will learn again and have a discussion.

How do you get the information out to the public, to the politicians for the responders in the sense that this was a huge success, rather than what is the bad things that happen and how do you get that out, and that may be part of the issue about public relations -- and how do you deal with public relations in these kinds of issues.

MALE VOICE: One of the things that I have been thinking about that you might want to think over a little bit, and it was in the Ledbetter Report, and it is just common sense, and that is

that the acute exposures to any type of event, toxin, agent, organism, whatever, if it is high enough you should see something acutely and not necessarily see something 3 months, 3 years, 30 years down the road, with rare exception.

But, wouldn't it be neat if we had a time line, or essentially some type of not just an algorithm or surveillance system, but basically set markers post deployment for categories of illnesses or diseases that you can exclude or no longer need to screen for on a regular basis, or something like that.

One of the disturbing things is not only that the DNBI rates were the lowest of all time, but the notion that we had scientists including talk about now genetic defects being passed on for agents that no one has ever heard could be passed on through spouses while we are looking for it.

No one has debunked systematically the fact of what agents do we see that have passed on -- that could come down in the children three years after -- you know, it ain't there, and maybe there is a definitive way to say some of that up front in such a way that at least -- the state of the art of the science that we know about; heavy metals, what we

know about infectious agents to a certain degree.

DR. KULLER: Well, I think you are absolutely right. Unfortunately, the perception is that science and whatever else goes on afterwards -- but, another area that would be very interesting is to go to the National Center for Health Statistics which does the health interview survey.

You basically know yourselves, for example -- which has never been done -- given the fact that you have 500-and-some thousand people that went to the Persian Gulf and were there for x-periods of time and given their ages, how many people would you expect -- who were given the National Health Interview Survey data from home interview survey -- how many people do you expect are going to complain about losing hair, anxiety, depression, weakness, fatigue?

You find out that there are a lot when you multiply it by 535, and with 2% of 535 there is a hell of a lot of people, and that is the kind of things that would be useful. So, we could talk about that in terms of ways of putting it together on how to do it.

DR. BROOME: I haven't seen the (inaudible). I don't know if others have had copies

of it, or not. I don't know if anybody -- if the Board could get us copies of that?

MALE VOICE: (Inaudible.)

MALE VOICE: Well, there is a thing causing Defense --

MALE VOICE: (Inaudible.)

DR. KULLER: Defense does a thing called Defense Environmental something, and that is what we used in the past, and a surprising -- well, it depends on where it was.

I think in Saudi Arabia there is no question. In Vietnam it was a total -- it was a disaster, for legitimate reasons. I mean, it wasn't -- it just -- for logical reasons. I didn't know what, you know, very often, exactly where they were.

You are thinking about if they are really worried about link -- where the ranch hands thought they were and where the unit thought they were in terms of exposure to Agent Orange, it just didn't work, but here it is very different.

But, anyway, I think what the main message is, is that I think there is a lot of good scientific help out there that needs to be utilized both before there is a catastrophe and certainly to

try and diffuse things along by using good science.

I think the Ledbetter (sic) Commission and things like that have turned out to be very useful and helpful and that is probably very, very important, but I think the point that was just raised -- and I think somehow -- and that may be the discussion about the information science here.

There also has to be some way for the good things to come out. I think it was really very unfortunate that the good things that happened in regards to the success -- and the same thing in Somalia.

I think the report on Somalia -- I think the report that went on in Guantanamo, which I think is fantastic, the success in Guantanamo preventing disease at all those -- in all our patients who went into Guantanamo, and also the situation in Somalia.

That has to be written up somehow and somebody -- there has to be some type of a way of getting that information out so you diffuse the fact that you don't have a syndrome, the next thing, saying that every soldier who went to Somalia got malaria, or that the drugs used to treat malaria are

giving them all liver disease, or some strange disease now, or something.

We should have a post Somalia syndrome and start all over again, if you go to Haiti there will be a post Haiti syndrome, and we will just have to get the information out.

MALE VOICE: After three days.

DR. KULLER: Three days?

(Laughter.)

Okay. Any other --

DR. ASCHER: I have two items.

DR. KULLER: Yes.

DR. ASCHER: Your comment maybe wasn't clear about meeting the night before the meeting. In the past when the meetings were at really the sort of places like Parson's Island, it was a defector situation that all the committees would sort of congregate and talk, and I will propose at least in the case of my committee that you look for a meeting of the meeting -- a meeting of the group the night before.

If you could, come in the night before. If you can't make it, that is fine, including August 2nd.

COLONEL PETERSON: Well, the only problem

with August 2nd is the offer -- we are not paying for this. The AFEB -- and the funds that were offered to me were to fly people in one day.

MALE VOICE: In your case, you can't do that.

MALE VOICE: Whoa.

DR. ASCHER: Red Eye.

MALE VOICE: My favorite.

(Laughter.)

MALE VOICE: I would call --

DR. ASCHER: Anyway, if possible, if anybody is around, we will talk. The other thing is -- I am trying to think what the Committee chair could do.

One of the things I was thinking about is what we might want to suggest for the agenda of sort of general interest, and I had two items that I have sort of come up with. I will propose them and then see if they come to pass.

One is that the Rickettsia Group meets about every year and a half and it is coming up, and the President is Abdu Azad who is over at Maryland, and he I think if asked would be delighted to come over and tell us about the last couple of years of rickettsia. There is a lot happening. We

have got a cause of cat scratch. We have got all sorts of stuff, and I think if that is reasonable we would want to give an update on rickettsia. It is easy to do, and we are overdue.

DR. HANSEN: At the October meeting?

DR. ASCHER: Yes, here. I am talking about here at the October meeting.

COLONEL PETERSON: Yeah, if you send me his name and phone number, I will do it.

DR. ASCHER: Yeah. I will ask him first. There is a conflict if that meeting is at the same time as ICAAC, but I don't know that that causes that big a problem.

COLONEL PETERSON: I mentioned what happened was it was set up these dates, just like the dates for '95. What we did for '94 was the same process. We asked everybody six months ahead of time what dates can you come.

What I have to do is sit down and say, well, three people can come on this date and ten can come on this date and, obviously, the one where ten can come. So, that is the logic that was used, and I can't go back and reconstruct it, but that is what happened. The most people could come on October 6 and 7.

DR. ASCHER: The other item is, I am wondering if we could get Claire to have somebody from the Emerging Pathogens Initiative, CDC, come up and talk to us.

I understand there is going to be a request for proposal out on the street very soon for ten Centers for Emerging Pathogens with major infrastructure improvements in states and other places, including our own. We are very interested, of course.

But, unless this is done with some knowledge of DOD, then we are going to end up with a disconnect, and the resources are not going to be perfectly merged, and what is the best way you could look at this.

The boldest way to say it is that the National Emerging Pathogens Initiative should have some money given to DOD so that their expertise can be continued and not have to be dependent on the basis of a weaponized biological warfare defense.

This is something that I really feel strongly about, that there is need for infectious disease research in DOD that is not aimed at some bomb full of some toxin. I think CDC would agree if we work with them properly.

DR. BROOME: I think it is an excellent idea and, in fact, we have already in discussions with Colonel Bancroft indicated the hope that DOD both domestically and, at least as importantly, internationally would be active participants in surveillance systems for emerging and re-emerging infections.

I wouldn't want to leave the impression that CDC has huge amounts of extra funding, because that is not true. On the other hand, this is currently a topic that is a very viable justification for funding that might be helpful for DOD to compete for funds as part of the activity.

DR. KULLER: We are not pushing you if the initiative is not ready, and they are not ready. But, as soon as the -- you have got someone to identify it, let's hear about it.

DR. BROOME: Well, I think it would be reasonable to go ahead. There has been a lot of presentations and discussion this year of what CDC's approach to this issue looks like, and it would be very appropriate --

MALE VOICE: How about Jim?

DR. BROOME: -- to have DOD's perspective and participation in that.

DR. HANSEN: I might add, it isn't too early for us to be thinking about the February meeting of '95 in terms of at least kind of a theme. We always had sort of a theme plus other things.

MALE VOICE: Right.

DR. HANSEN: You were mentioning CDC. They have an excellent, very involved prevention wing which I am familiar with, and I know prevention injury-wise, as well as disease-wise. It is probably about right for next February, so I am just picking up on your --

MALE VOICE: Same idea.

DR. HANSEN: -- mention of CDC that maybe they might be one of the speakers involved in the February '95 meetings.

DR. BROOME: Well, first, Jones I think has got an injury working group.

DR. HANSEN: That's right.

DR. BROOME: And it is very actively thinking about that, and they are offering him just for coordinate --

DR. HANSEN: I mean, he is expecting it around that time frame.

DR. BROOME: And CDC has invited several clerks from CDC to participate on that working

group, so we would certainly be happy to work with him on the topic.

DR. KULLER: Okay, one more.

DR. JORDAN: I just have one possible suggestion, and that is that for the Comprehensive Clinical Evaluation Program we have gotten -- the Services have gotten no additional funds for that.

I think that the AFEB is going to be doing -- called on to do more and more, and I think if funds is a problem with AFEB that this would be the ideal time to request more funding for travel and for meetings.

I mean, it really looks like an activist organization at this time, and I think that is great.

MALE VOICE: Okay, we certainly will.

MALE VOICE: I think Bruce is concerned about his people getting here. They will have to pay their own way.

MALE VOICE: Even the size increases.

MALE VOICE: Um-hum, that's right.

MALE VOICE: I don't know how that is done, but I think you --

COLONEL PETERSON: Well, we put in a budget just like everybody else does. It is a matter of

programming.

The problem we have, frankly, is if we form -- we have formed three formal subcommittees so far, two of which have really not taken off and done very much.

The third one, I think, will take off under Bruce Jones' direction and, so, it is hard to plan when you don't -- I still don't have from Bruce yet a list of the -- a true list of who is going to be on that subgroup, to have, you know, how many people, nor do I know for sure how often Bruce -- it is coming, I guess -- nor do I know how often it is going to meet.

But, your point is well taken. As these things begin and develop, then we will ask for more funds for these purposes. I don't anticipate that that would be a problem.

DR. BROOME: This is just a follow up on the previous discussion of the August working group meeting.

I heard you say that there would be documents prepared, but we couldn't send them out. Now, I had years of interactions with the ACIP, and it sounds like what you are supposing for us to do

is sort of something that would (inaudible).

COLONEL PETERSON: These are classified documents.

DR. BROOME: But, I guess -- I mean, I understand that presents all sorts of unique problems, but I think you are putting the Committee at a real disadvantage for them not to have the time to look at this in advance and think about it, because we do these things all the time at ACIP, and it is really tough.

COLONEL PETERSON: I am passing on to you what was passed on to me by the people who I think know more about it than I do. I know absolutely nothing about sending classified material through the mail and how you do that.

I will pursue it, though, and ask if it can be done. I will make it happen. If I am told there is so many blocks to jump over --

DR. KULLER: I am not sure how much more -- maybe I am wrong. I am not sure how much more you are going to get than what you have heard today.

DR. ASCHER: Exactly. I think what we need is --

DR. KULLER: I don't think there is anything more there.

DR. ASCHER: I will buy what they want. It can be agent-x, or disease-x. It can say, "This is a disease where its presence in a country is known by intelligence of a secret nature and therefore it is weaponized in that country, what do we recommend?"

You don't have to name the disease, you don't have to name the country. You can make scenarios and build algorithms.

COLONEL PETERSON: I think we have to --

DR. ASCHER: I think we ought to start that.

COLONEL PETERSON: I think we have to put some faith in the people who are setting this up. It was their -- it was their suggestion. Major Klenke

and --

MALE VOICE: Colonel Takafuji, here. Correct me if I am wrong, but the intent wasn't to do this in one day, so I am depending on those people to put something together.

We discussed initially how this could be done without having things go out ahead of time in a classified nature so that we could start at 9:00 in the morning and be finished at 4:00 in the

afternoon.

Now, that may be a dream to some degree, but I have to put my faith in the people who know what they are talking about in terms of putting this package together, and if that changes for some reason, I am sure I will hear about it, but --

DR. ASCHER: Let me make a comment on that. All the information that you have that was handed out to you today is basically it. The only thing that you don't have is that threat list. That is basically what it comes down to. Remember that threat list that was shown?

COLONEL TAKAFUJI: But, we can reference it. It is also a dynamic threat list.

MALE VOICE: Yeah.

COLONEL TAKAFUJI: We are not going to be --

MALE VOICE: You don't want to get into that where you have to be responsible for classified materials, believe me, because if you lose it, then you really are in deep kimchee, so don't do that.

COLONEL PETERS: They won't even let you take notes during the session here, so --

DR. ASCHER: (Inaudible.)

MALE VOICE: (Inaudible.)

DR. ASCHER: "Does this country possess a BW threat? A, yes/no." Then you go to the threat list. We don't ever have to see that.

COLONEL TAKAFUJI: What you saw today was in essence what (inaudible).

DR. KULLER: Mike, why don't -- I will pass this over to you and then you can perhaps get it to your Committee, if you want to.

COLONEL TAKAFUJI: Yes.

DR. KULLER: Or, do you want me to copy it to the Committee? Whatever you think.

MALE VOICE: (Inaudible.)

DR. KULLER: Okay, well, I will copy this for the Committee that would be involved, because this pretty much tells the ground rules of what they are interested in, and I think it is not --

It is not that specific to a specific vaccine at a specific place or a specific time, but it is more a question about how you define particular programmatic areas and what they go for.

So, I mean, each -- obviously, each individual situation is going to require an individual response, but I think the main thing is, it is a general statement of agreement, or

disagreement with the policy plan which has been formulated, and the priorities.

DR. BROOME: The other question is, I heard you say -- well, you know, suggest that meeting might also raise the issue of vaccine production facilities. Is that the case, or not?

DR. KULLER: No.

DR. BROOME: No, nothing to do with that? Okay.

MALE VOICE: (Inaudible.)

DR. KULLER: That is going to be built, but it is going to be built in West Virginia.

(Laughter.)

(Whereupon, at 5:14 p.m., the above proceedings were concluded.)

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